# CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this paper is being electronically transmitted to the U.S. Patent and Trademark Office via Private Pair on December 7, 2009.

/Matthew A. Pequignot 43851/ Matthew A. Pequignot Reg. 43,851

# PATENT IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	)	
Phillips et. al	) Examiner: Mathieu D. Vargot	
Appl. No.: 10/706,142	) Group Art Unit: 1791	
Filed: November 12, 2003	) Atty. Dkt. No.: 18-32 US DIV1	
Confirmation No. 6069	) )	
For: Methods for Formi Articles Having Di Surfaces and Color Backgrounds	fractive )	
EFILED		
Commissioner for Patents		

Sir:

# APPEAL BRIEF PURSUANT TO 37 C.F.R. §41.37 (AMENDED)

This Appeal Brief is responsive to the Notification of Non-Compliant Appeal Brief mailed November 5, 2009. Specifically, the present Appeal Brief is intended to replace the Appeal Brief originally filed on August 14, 2009 and is substantively identical to such Appeal Brief except for the correction of Section V which now provides the appropriate additional page and line numbers pursuant to 37 C.F.R. 41.37(c)(1)(v). It is respectfully requested that this brief

and all previously submitted documents (including the Declaration, extension of time, etc., which are not being resubmitted herewith) be accepted as timely filed and considered.

This is an appeal to the Board of Patent Appeals and Interferences from a final Office action mailed December 16, 2008 in which the Examiner rejected all pending claims in the above-identified application (i.e., claims 1 and 3-7).

Applicant timely filed a Notice of Appeal in this case on May 14, 2009. Accordingly, a brief in support of the appeal was due by July 14, 2009 (37 C.F.R. §41.37(a)(1)) but was originally filed on August 14, 2009 accompanied by a One (1) Month Extension of Time (37 C.F.R. §1.136(a)(1)) and the required \$130.00 fee (37 C.F.R. §1.17(a)(5)).

In addition, the \$540.00 fee due in connection with the filing of this Brief ((37 C.F.R. \$41.20(b)(2)) was originally submitted on August 14, 2009

Applicant does not believe that any additional fees are due in connection with the filing of this Brief. However, if Applicants are incorrect, you are hereby authorized to charge any such fee, or credit any overpayment, to Deposit Account No. 50-1465 and are respectfully requested to notify the undersigned of any such charge or credit.

# I. <u>REAL PARTY IN INTEREST</u>

The real party in interest in this appeal is JDS Uniphase Corporation, the assignee of this application.

### II. RELATED APPEALS AND INTERFERENCES

No related appeals or interferences are known to Appellants, Appellants legal representative, or assignee which may be related to, directly affect or be directly affected by or have bearing on the Board's decision in this appeal.

### III. STATUS OF CLAIMS

Claims 1 and 3-7 are pending in the application.

Claim 2 is canceled.

Claims 1 and 3-7 stand finally rejected under 35 U.S.C. 103(a).

The rejections of claims 1 and 3-7 are being appealed.

### IV. STATUS OF AMENDMENTS

No amendments have been filed in this case subsequent to the December 16, 2008 final Office Action. All amendments are believed to have been entered in this case.

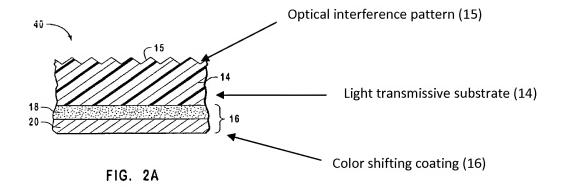
# V. SUMMARY OF CLAIMED SUBJECT MATTER

Each of the claims at issue in the present appeal are directed towards one or more methods of forming security articles (Application (hereinafter "Appl"), pg. 2, lns. 6-12). In particular, pending claims 1 and 3-7 (claim 1 being the only independent claim) each recite methods of making security articles which involve forming an optical interference pattern (e.g., a hologram or diffraction layer) on one side of a light transmissive substrate and a color shifting coating (e.g., a coating which appears a different color when viewed at different angles) on the opposite side of the substrate (see, for example, Appl pg. 5, lns10-20; pg. 14, lns. 6-11; see also Appl pg. 23, lns. 3-6; and pg. 13, lns. 5-14 and lns. 16-19¹). In the embodiments claimed, such as in claim 1, the thickness of the claimed substrate is recited to be within a range of 3 μm to 100 μm (see Appl pg. 18, lns. 14-18 for full support; and pg. 10, lns 8-11 for additional partial support).

An example security article (40) which can be produced according to the claimed methods is illustrated by Fig. 2A of the subject application, reproduced below:

-

<sup>&</sup>lt;sup>1</sup> These pages, at the indicated line ranges, explicitly provide support for the limitations in claim 1 that there are differences in perceived or displayed colors at different viewing angles or different angles of incident light. Moreover, the disclosure of the claimed color shifting coating on the opposite side of the substrate as the diffraction grating or holographic image (or optical interference) pattern, in certain embodiments, reveals that the colors observed will be secondary or "background" relative to the light effects caused to be displayed by the holographic image pattern, for example. See Fig. 1A or 2A, for example (with accompanying description in the specification).



Producing security articles according to the claimed methods has numerous purposes and/or advantages, the principal one of which is to provide security articles which are more difficult to counterfeit or duplicate (Appl, pg. 5, lns. 1-3). For example, because of the increasing availability of advanced technologies, counterfeiting methods (e.g., for "faking" credit cards and bank notes and the like) have become quite sophisticated (see Appl pg. 3, ln. 17 - pg. 4, ln. 1). As a result of this sophistication, as well as the increasing availability of such counterfeiting technologies, Applicants of the subject application have invented the present methods to produce security articles which are more difficult to duplicate (see Appl pg. 5, lns. 1-3 and pg. 3, ln. 17 – pg. 4, ln. 1 and pg. 4, lns. 13-16). When a security article is more difficult to duplicate it is, of course, more effective at providing its intended security functions.

Specifically, by locating the optical interference pattern (e.g., diffraction surface or holgram) on the opposite side of the light transmissive substrate of the color shifting coating (e.g., as claimed in pending claim 1), Applicants have discovered that unexpected, unique optical effects are achieved. In particular, because such optical effects are unique or unusual in appearance and/or because such optical effects change or shift depending on viewing angles and the like, the security articles produced by the claimed methods cannot be easily reproduced or counterfeited using known techniques for copying prior art security articles. (Garth Zambory Declaration, April 26, 2007 (hereinafter the "Garth Decl"), pgs. 7-8).

### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are as follows:

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyama et al. (U.S. Patent No. 5,700,550, "Uyama").

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyama in view of Coombs et al. (U.S. Patent No. 5,214,530, "Coombs").

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyama in view of the admitted prior art.

# VII. <u>ARGUMENT</u>

#### A. INTRODUCTION

Independent claim 1 of the subject application recites a method of forming a security article as follows:

[P]roviding a light transmissive substrate having a first surface and an opposing second surface, the first surface having an optical interference pattern; and

forming a color shifting optical coating on the second surface of the substrate, the second surface being substantially planar,

wherein the color shifting coating provides an observable discrete color shift such that the article has a first background color at a first angle of incident light or viewing and a second background color different from the first background color at a second angle of incident light or viewing,

the article exhibiting an optical diffraction grating pattern effect or a holographic image pattern effect in addition to the first and second background colors, and wherein a thickness of the substrate is in a range of 3  $\mu m$  to 100  $\mu m$ . (emphasis added)

As is clear from the plain language of the claim, the method limitations at issue require that, in forming a security article, an optical interference pattern (e.g., a diffraction layer or hologram) and a color shifting layer each be formed <u>on opposite sides</u> (i.e., first and second "opposing" side surfaces) of a light transmissive substrate. Although the Uyama reference cited by the Examiner as the basis of the subject §103 rejections admittedly teaches some form of optical device containing a hologram, it is undisputed in the Office record that Uyama does not

teach or disclose forming a security article having an optical interference pattern and a color shifting layer located <u>on opposite sides of a light transmissive substrate</u>. (September 21, 2007 Advisory Action, pg. 2; August 2, 2005 Non-Final Rejection, pg. 2 ("...Uyama et al essentially lacking the aspect of placing the hologram and color shifting coating on opposite sides of the substrate."))

Although the Examiner has maintained the subject rejection of claim 1 over Uyama, the Examiner has not done so by citation to any secondary reference which provides this additional, necessary teaching. Rather, in order to support the subject §103 rejection, the Examiner stands upon a single statement as motivation for modifying Uyama to arrive at the claimed invention:

"It is submitted that one of ordinary skill in the art would have found it obvious to have formed the two features on opposite sides of the substrate dependent on the exact optical effect desired to perform the authentication." (see August 2, 2005 Non-Final Rejection, pg. 2)<sup>2</sup>

Although the Examiner's rejection appears to rely on knowledge in the art that different optical effects can be achieved by locating the two claimed optical layers on opposite sides of the light transmissive substrate, there is no evidence in the record that such knowledge is part of the prior art (or otherwise known to those of ordinary skill). In fact, not only are these teachings not found in the prior art, but the Examiner – contradicting the very foundation of the subject §103 rejection – took the position in early rejections that putting the claimed optical layers on opposite sides of the substrate (as compared to the same side) would cause <u>no difference</u> in the appearance of the optical effects.

"[T]he placement of the color shifting layer with respect to the interference pattern would have <u>no bearing on the appearance</u> of the color shift property and that of the security article." (January 17, 2007 Non-Final Rejection, pg. 3) (emphasis added)

6

-

<sup>&</sup>lt;sup>2</sup> Although the Examiner has maintained the subject §103 rejection through several years of prosecution which have included multiple claim amendments, the rejection over Uyama remains unsupported by any additional prior art, teachings, or reasoning. Instead, in subsequent rejections, the Examiner has simply referred back – by citation to paragraph number – to this original, unsupported "reasoning".

"[A]s the substrates are said to be transparent – the incident light clearly undergoes the same path and would therefore be subjected to the same effects due to the optical effects of the layers." (January 17, 2007 Non-Final Rejection, pg. 3) (emphasis added)

Such a rejection, unsupported by any evidence and self-contradicted by the Examiner making it, should not be sustained.

In short, because, as discussed in more detail below, each of the limitations recited in claim 1 are not taught or otherwise suggested by the prior art and/or because the Examiner has not otherwise set out any motivation supported by *rational* underpinnings as reasoning to modify the Uyama reference to arrive at Applicants' invention (e.g., which does not contradict the Examiner's own erroneous beliefs about the technology at issue, for example), the rejection of claim 1 and each of its independent claims should be withdrawn.

# B. THE PRIOR ART RELIED UPON BY THE EXAMINER DOES NOT TEACH OR SUGGEST ALL OF THE LIMITATIONS RECITED IN CLAIM 1

In order to sustain an obviousness rejection, MPEP §2143.03 requires that "[a]ll words in a claim must be considered". To render claim 1 unpatentable, however, the Office must do more than merely "consider" each and every feature of the claims. Instead, the relied upon prior art to Uyama must also teach or suggest *each and every claim feature*. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (emphasis added) (to establish *prima facie* obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art); *In re Dow Chemical Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988) ("Both the suggestion and the expectation of success *must be founded in the prior art, not in the applicant's disclosures.*... There must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant's disclosure.") (emphasis added) (citation omitted). Indeed, the Board of Patent Appeals and Interferences recently confirmed that a proper, post-KSR obviousness rejection still requires the Examiner to "make a 'searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art.' . . . Thus, 'obviousness requires a suggestion of all limitations in a claim." *In re Wada and Murphy*, Appeal 2007-3733, \*7, citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) and *CFMT v. Yieldup Intern. Corp.*, 349 F.3d

1333, 1342 (Fed. Cir. 2003) (emphasis in original). In short, it remains settled law that an obviousness rejection requires a suggestion or teaching in the prior art of <u>all</u> the claim elements.<sup>3</sup>

Given this state of the law, and principally because independent claim 1 expressly recites a feature nowhere taught by the record prior art, the Examiner's rejection of claim 1 (and therefore its dependent claims) cannot be maintained. In this regard, the Examiner has repeatedly conceded that the Uyama reference does not teach to locate a diffraction layer (i.e., an optical interference pattern) on the opposite side of a light transmissive substrate of a color shifting layer. (September 21, 2007 Advisory Action, pg. 2; July 29, 2005 Office Action, pg. 2 ("Uyama et al. essentially lacking the aspect of placing the hologram and color shifting coating on opposite sides of the substrate.")). Moreover, the Examiner has not cited any secondary prior art reference which supplies such a teaching.

Rather than supplying relevant supporting evidence (which discloses this important claimed feature), the Examiner has, instead, resorted to grounds of rejection consisting of a single, unsupported "statement" (a single sentence) that persons of "ordinary skill in the art" would modify Uyama as claimed in order to obtain "the exact optical effect desired". (August 2, 2005 Non-Final Rejection, pg. 2). Although perhaps such a rejection would carry more weight if the Examiner cited to document evidence to support the relied upon statement (although this is not conceded), there is no prior art reference of record which teaches that any difference in optical effects (relative to prior art devices) would be achieved by forming the claimed optical layers on opposite substrate surfaces. In fact, rather than providing such supporting evidence, the Examiner, in a later Office Action, made specific allegations that there would be no difference in optical effects achieved by modifying the location of optical layers according to Applicants' claimed invention (January 17, 2007 Non-Final Rejection, pg. 3). Although the Examiner has now reluctantly admitted that differences in observable optical effects are present in articles produced according to Applicants' methods (Applicants had to provide samples and

-

<sup>&</sup>lt;sup>3</sup> "This includes what could be characterized as simple changes, as in *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed.Cir.1984) (Although a prior art device could have been turned upside down, that did not make the modification obvious unless the prior art fairly suggested the desirability of turning the device upside down.)." *In re Chu*, 66 F.3d 292, 298 (Fed. Cir. 1995)

<sup>&</sup>lt;sup>4</sup> Although the Examiner did not believe that optical effect differences would occur or be apparent absent some undisclosed feature of the transparent substrate in either Uyama or Applicants' claimed methods (January 17, 2007 Non-Final Rejection, pg. 3), the Examiner did not realize that by forming the optical layers on opposite sides of the substrate, the layers are optically decoupled and therefore exhibit noticeably different optical effects. (May 1, 2007 Applicants' Response, pgs. 4-5; Garth Decl., pgs. 4, 7-8)

accompanying declarations in order to convince the Examiner that such differences in optical effects would be visible) (see July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action), it is well settled that such hindsight knowledge (gleaned from Applicants' own disclosure) cannot, of course, be relied upon to bootstrap §103 based rejections of Applicants' claims. *In re Kubin*, 561 F.3d 1351, 1359 (Fed. Cir. 2009) ("[C]ourts should not succumb to hindsight claims of obviousness."); *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984) ("It is difficult but necessary that the decisionmaker forget what he or she has been taught . . . about the claimed invention and cast the mind back to the time the invention was made (often as here many years), to occupy the mind of one skilled in the art . . . ."). <sup>5</sup>

As set forth in detail above, the Examiner's articulated grounds for rejection as they relate to the limitation that the optical layers are formed on opposite sides of a light transmissive substrate are entirely unsupported by the prior art. Moreover, the "rationality" of the Examiner's grounds for modification of the Uyama reference is belied by the Examiner's own record statements (see July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action). Therefore, because there is no rational reasoning to support the Examiner's rejections of claims 1 and 3-7 ("[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead *there must be some articulated reasoning* with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (emphasis added)), and, moreover, because the failure of the prior art to teach or suggest each and every feature of a claim remains fatal to an obviousness rejection under 35 U.S.C. § 103 (*In re Wada and Murphy*, Appeal 2007-3733, \*7), the Examiner's rejections of claims 1 and 3-7 are improper and should be withdrawn.

# C. THE METHODS CLAIMED IN CLAIMS 1 AND 3-7 PRODUCE ARTICLES WHICH EXHIBIT "UNEXPECTED RESULTS"

Although, for at least the reasons set forth above, the Examiner has failed to make out a

.

<sup>&</sup>lt;sup>5</sup> The Examiner cannot now allege (absent supporting document evidence) that such information was well-known to those of ordinary skill in the art. If that were the case, the Examiner would not have concluded that no differences in optical effects could be achieved.

*prima facie* case of obviousness, even if a *prima facie* case were made, Applicants have submitted evidence of unexpected results which is sufficient to rebut such a showing.

A *prima facie* case of obviousness based on structural similarity is rebuttable by proof that the claimed compound possesses unexpectedly advantageous or superior properties. *In re Papesch*, 315 F.2d 381 (CCPA 1963). If a *prima facie* showing of obviousness is made, such showing may be rebutted based on "unexpected results" by demonstrating "that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected." *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995). Presence of a property not possessed by the prior art is evidence of nonobviousness. *In re Papesch*, 315 F.2d 381.

In the present case, security articles produced by the claimed methods exhibit optical effects which are noticeably and importantly different than optical effects exhibited by the closest prior art devices (i.e., devices produced in accordance with the teachings of Uyama which have the optical interference layer formed on the same side of the substrate as the color shifting layer) (see July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action; Garth Decl., pgs. 4, 7-8). In this regard, it is precisely these differences – some subtle (or covert) and some distinct (or overt) – that distinguish the subject articles from the prior art and make them more difficult to simulate or counterfeit. Although the Examiner has attempted to characterize these optical effect differences as inconsequential and different in degree rather than kind - notwithstanding that such a qualification is believed to be irrelevant to patentability ("[D]ifferences in properties cannot be disregarded on the ground that they are differences in degree rather than kind" *Exparte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992)) - Applicants submit that the proven optical differences (demonstrated by the samples and declarations of record as well as admitted to by the Examiner) are both significant and with practical advantage.

The comparisons of the prior art articles to the sample articles produced by the claimed methods revealed several important, exemplar optical distinctions. For example, two of the samples produced resulted in actual image <u>inversions</u> of the images (image rotations of 180 degrees) relative to the prior art comparison samples (see July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action; Garth Decl., pgs. 5-6 (regarding samples 3a and 6a)). Furthermore, two

samples produced resulted in certain optical effects – the holograms - disappearing at certain viewing angles (see July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action; Garth Decl., pgs. 5-6 (regarding samples 3a and 5a)).

While not recognized by the Examiner, these optical effects *are* distinct and unusual and are certainly more than mere differences "in degree". <sup>6</sup> Moreover, significantly, the effects are difficult to replicate using known counterfeiting methods. See, for example, Garth Decl., pgs. 7-8 ("Such a security feature, where the holographic image completely disappears at a discrete angle, would be more difficult to simulate or counterfeit than a feature in which the color shift and holographic effects we[re] always both present, as is the case in sample 3b."). That is – a party could use security articles produced in accordance with the claimed methods, and if a counterfeiter attempted to copy the articles, the counterfeiter would obtain articles which exhibit prior art-type optical effects. Therefore, such articles would be detectable as counterfeits. This, of course, is precisely one of the stated objects of the subject application (i.e., to provide security articles which are difficult to counterfeit). (Appl pg. 5, ln. 1 – pg. 6, ln. 10) (Regardless, see *In re Chu*, 66 F.3d 292, 298 (Fed. Cir. 1995), for the proposition that even when an applicant's specification does not discuss the invention's unexpected results, evidence of the unexpected results must be considered.).

Acknowledging these differences in optical effects produced (as well as their practical purpose), it is important to note both that the prior art nowhere teaches that differences in optical effects would be achieved employing the claimed methods. Perhaps more importantly, the Examiner himself (a person presumably trained in the relevant arts and therefore a person of so-called "ordinary skill") expressed disbelief that *any* differences in optical effects would be achieved. (January 17, 2007 Non-Final Rejection, pg. 3). In fact, it was not until Applicants were forced to provide examples to the Examiner to prove that the optical differences would occur that

.

<sup>&</sup>lt;sup>6</sup> Although at least one additional sample resulted in optical effects "more muted" (i.e. subdued) than the comparison prior art sample (see Garth Decl., pg 8), such muted effects are particularly useful as security articles or images because of the difficultly in their reproduction ("From my experience, more muted images and colors are more difficult to simulate....Color printers and other devices such as scanners, cameras and related output devices have a harder time to accurately replicate a muted color in comparison to a highly bright, high chroma sample. Thus, sample 2a [produced according to Applicants' claimed method] is more difficult to counterfeit than the image seen in sample 2b." (Garth Decl., pg 8). Notwithstanding these benefits, the muted effects only appear to occur when the samples are viewed through the optical interference pattern layer. Therefore, rather than the optical effects being unpredictable as suggested by the Examiner, the muted effects can be selected or deselected by choosing which coating (the optical inference pattern or the color shifting coating) of the subject security articles faces the viewer.

the Examiner would acknowledge that actual optical differences would result. For the foregoing reasons, it is submitted that the optical effects differences achieved are properly considered "unexpected".

By way of brief summary of the record evidence:

- sample articles produced to the Examiner (and authenticated and explained by supporting declarations) were produced according to the currently claimed methods (i.e., the samples were produced by techniques commensurate in scope with the claimed subject matter); (Garth Decl., pg. 3)
- the comparison samples were produced in accordance with the closest prior art that is, the Uyama reference relied upon by the Examiner; (Garth Decl., pg. 3)
- there are distinguishing, visible optical differences between Applicants' articles and those produced in accordance with the closest prior art; (July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action; Garth Decl., pgs. 5-6)
- the optical effect differences were "unexpected" as admitted by the Examiner in the Office record; (July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action) and
- the optical differences displayed by Applicants' sample articles have a practical purpose or advantage which is related to the stated purpose of the present application for invention. (Garth Decl., pgs. 7-8; Appl. pg. 5, lns. 1-3).

For the reasons explained in detail above (as supported by the evidence of record in this case), Applicants respectfully submit that they have produced sufficient evidence of "unexpected results" such as to rebut any *prima facie* showing of obviousness. (July 10, 2007 Final Rejection, pgs. 2-3; September 21, 2007 Advisory Action; March 28, 2008 Ex Parte Quayle Action, pg. 4; April 20, 2009 Advisory Action; Garth Decl., pgs. 5-6). Reversal by the Board of the rejections of the subject claims is therefore respectfully requested.

# VIII. CONCLUSION

Having set forth the factual and legal basis which supports the patentability of the claims on appeal, it is submitted that claims 1 and 3-7 are allowable. Accordingly, it is respectfully urged that the Board reverse the Examiner's rejection of such claims.

A Claims Appendix, Evidence Appendix, and Related Proceedings Appendix are attached hereto in compliance with 37 C.F.R. §41.37.

Respectfully Submitted,

Date: December 7, 2009

/Matthew A. Pequignot 43851/ Matthew A. Pequignot Reg. No. 43,851 Attorney for Applicant

Pequignot + Myers LLC 140 Marine View Avenue, #220 Solana Beach, CA 92075 Telephone: 202-328-1200

Facsimile: 202-328-2219

#### **CLAIMS APPENDIX**

1. (rejected) A method of forming a security article, comprising the steps of:

providing a light transmissive substrate having a first surface and an opposing second surface, the first surface having an optical interference pattern; and

forming a color shifting optical coating on the second surface of the substrate, the second surface being substantially planar,

wherein the color shifting coating provides an observable discrete color shift such that the article has a first background color at a first angle of incident light or viewing and a second background color different from the first background color at a second angle of incident light or viewing,

the article exhibiting an optical diffraction grating pattern effect or a holographic image pattern effect in addition to the first and second background colors, and wherein a thickness of the substrate is in a range of 3  $\mu m$  to 100  $\mu m$ .

### 2. (canceled)

- 3. (rejected) The method of claim 1, wherein the color shifting optical coating is formed by depositing an absorber layer on the second surface of the substrate, depositing a dielectric layer overlying the absorber layer and depositing a reflector layer overlying the dielectric layer.
- 4. (rejected) The method of claim 1, wherein the color shifting optical coating is formed by depositing a first absorber layer on the second surface of the substrate, depositing a dielectric layer overlying the absorber layer and depositing a second absorber layer overlying the dielectric layer.
- 5. (rejected) The method of claim 1, wherein the color shifting optical coating is formed by applying a color shifting ink comprising a plurality of multilayer color shifting flakes dispersed in a polymeric medium to the second surface of the substrate.

6. (rejected) The method of claim 1, wherein the color shifting optical coating is formed on the second surface of the substrate by coextruding a color shifting material comprising a plurality of multilayer optical interference flakes dispersed in a polymeric medium, with a material forming the substrate.

7. (rejected) The method of claim 1, further comprising the steps of forming a release layer on the substrate, and of hot stamping the security article to an object.

# EVIDENCE APPENDIX

 Garth Zambory Declaration dated April 26, 2007 (attached; entered with the Response filed May 1, 2007)

# **RELATED PROCEEDINGS APPENDIX**

None.